

Appl. No. 10/051,535
Amdt. Dated December 7, 2005
Reply to Office Action of July 28, 2005

REMARKS

This is in response to the Office Action mailed July 28, 2005. In the Office Action, (i) the specification was objected to, (ii) Claims 16 and 17 were objected to, (iii) claim 12 was rejected under 35 U.S.C. §112, (iv) Claims 1-8 were rejected under 35 U.S.C. §101, (v) Claims 1-19 were rejected under 35 U.S.C. §102(b), (vi) Claims 5-7 and 14-17 were rejected under 35 U.S.C. §103(a); and (vii) Claims 1-19 were provisionally rejected for double patenting under 35 U.S.C. §101. Reexamination and reconsideration of this case is respectfully requested in view of the amendments made herein and the following remarks.

Claims 1-8, 12, and 16-17 have been amended by this response. Claim 19 has been cancelled without prejudice or disclaimer of subject matter. New claims 20-21 have been added. Accordingly, claims 1-18 and 20-21 remain at issue in the patent application. Of those at issue, claims 1 and 9 are independent claims.

Applicant believes that no new matter has been added by this response.

I) SPECIFICATION OBJECTION

The disclosure was objected to because of the informality that many references to the drawings were mislabeled. Applicant has amended the disclosure to detect and correct errors of this nature of which the Applicant has become aware. Applicant respectfully requests that the objection to the disclosure to be withdrawn.

II) CLAIM OBJECTIONS

The Office Action objected to claim 16 for containing an extra period, and to claim 17 for failing to further limit the subject matter of a previous claim. [Office Action, page 3]. Applicant has amended claim 16 to remove the extra period and amended claim 17 to further limit the subject matter of a previous claim (claim 16). Applicant believes these objections have been overcome in view of the foregoing amendments and respectfully requests the Examiner to withdraw the objection to claims 16 and 17.

III) CLAIM REJECTION UNDER 35 U.S.C. § 112

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Claim 12 was rejected under 35 U.S.C. §112, second paragraph, as having insufficient antecedent basis for "the behavioral model" in line 2 of the claim. [Office Action, page 3].

Applicant has amended claim 12 to provide proper antecedent basis for "the behavioral model". Applicant believes this rejection has been overcome in view of the amendment and respectfully requests the Examiner to withdraw the outstanding 35 U.S.C. §112 rejection of claim 12.

IV) CLAIM REJECTION UNDER 35 U.S.C. § 101

Claims 1-8 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. [Office Action, page 3].

Applicant has amended claims 1-8 so that the claims are directed to a statutory subject matter of a storage medium that provides software that, if executed by a computing device, will cause the computing device to perform the operations claimed in amended claims 1-8.

For at least the foregoing reasons, Applicant respectfully requests the withdrawal of the outstanding 35 U.S.C. §1021 rejection of amended claims 1-8.

V) CLAIM REJECTION UNDER 35 U.S.C. § 102(b)

Claims 1-19 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,867,400 issued to El-Ghoroury. [Office Action, page 4].

Applicant respectfully traverses the 35 U.S.C. §102(b) claim rejection.

"To anticipate a claim, the reference must teach every element of the claim. 'A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... 'The identical invention must be shown in as complete detail as is contained in the claim.' *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." [MPEP § 2131, 8th Edition, Rev. 1, Feb. 2003, Pg. 2100-701].

Applicant respectfully submits that each and every element as set forth in the amended independent claim 1 is not found in El-Ghoroury, nor is the identical invention shown in El-Ghoroury in as complete detail as is contained in amended independent claim 1.

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Amended independent claim 1 recites in part:

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decompose the matched instruction set processor system into interconnected *design vectors*; and
analyze and map the interconnected *design vectors* into specific hardware and software elements. (emphasis added).

The embodiments of the invention are directed to systems designing and implementing matched instruction set processor system using design vectors, such as functional and interconnect vectors. As described in the detailed description starting at page 7 line 7, a vector is a portion of a processing pipeline that requires no further parallelism. A functional vector generally contains design information for one or more functional aspects of the processing pipeline, while an interconnect vector generally contains information for connectivity characteristics. The embodiments of the invention then decompose the matched instruction set processor system into interconnected *design vectors* and analyze and map the interconnected *design vectors* into specific hardware and software elements.

The Office Action alleges that El-Ghoroury discloses the foregoing features of the Applicant's invention. [Office Action, Page 4]. Applicant respectfully disagrees.

El-Ghoroury does not disclose the foregoing features of the Applicant's invention, particularly in regards to use of *design vectors* to decompose the matched instruction set processor system into and to analyze and map the interconnected *design vectors* into specific hardware and software elements. El-Ghoroury discloses an application specific processor design method based on using a library of pre-designed function blocks. El-Ghoroury as a whole is silent as to the use of design vectors to decompose the matched instruction set processor system into and to analyze and map the interconnected design vectors into specific hardware and software elements, as in the Applicant's invention.

The Applicant respectfully submits that because of the foregoing structural and functional differences between El-Ghoroury and the Applicant's invention claimed in amended independent

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claim 1, that each and every element as set forth in the amended independent claim 1 is not found in El-Ghoroury, nor is an identical invention shown in El-Ghoroury in as complete detail as is contained in the amended independent claim 1. Applicant thus respectfully submits that amended independent claim 1 is not anticipated by El-Ghoroury.

Amended independent claim 9 shares in the same above-described novel features of the amended independent claim 1 and for at least the above-stated reasons with regards to amended independent claim 1, Applicant respectfully submits that amended independent claim 9 is not anticipated by El-Ghoroury.

Dependent claims 2-8, and 10-18 directly or indirectly depend from amended independent claims 1 and 9, respectively, and thus include all the limitations of their respective independent claims, as well as reciting the above-described further limitations of particular utility. Therefore, for at least the above-stated reasons with regard to amended independent claims 1 and 9, Applicant respectfully submits that each of dependent claims 2-8, and 10-18 is not anticipated by El-Ghoroury.

For at least the foregoing reasons, Applicant respectfully requests the withdrawal of the outstanding 35 U.S.C. §102(b) rejection of claims 1-19.

VI) CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Dependent claims 5-7 and 14-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over El-Ghoroury in view of U.S. Patent No. 6,484,304 issued to Ussery. [Office Action, page 6]. Applicant respectfully traverses both of the rejections and contends a prima facie case of obviousness has not been established.

Dependent claims 5-7 and 14-17 directly or indirectly depend from amended independent claims 1 and 9, respectively, and thus include all the limitations of their respective independent claims described previously, as well as reciting the above-described further limitations of particular utility. Therefore, for at least the above-stated reasons with regard to amended independent claims 1 and 9, Applicant submits that dependent claims 5-7 and 14-17 are patentably distinguished over the cited prior art.

For at least the foregoing reasons, Applicant respectfully requests the withdrawal of the outstanding 35 U.S.C. §103(a) rejections of claims 5-7 and 14-17.

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VII) DOUBLE PATENTING

Claims 1-19 were provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of the claims 1-19, respectively, of co-pending Application No 10/052,312 (312).

Applicant respectfully requests that the Examiner withdraw the obviousness-type double patenting rejection of claims 1-19 for at least the reason that the Application No 10/052,312 (312) has been abandoned.

Claims 1-19 were also provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of the claims 1-19, respectively, of co-pending Application No 10/051,217 (217).

Applicant respectfully offers to file a terminal disclaimer to obviate the obviousness-type double patenting rejection in the event that the pending claims are considered to be in condition for allowance. Of course, in order to facilitate prosecution of the subject application, Examiner is invited to contact the undersigned attorney at the phone number listed below in the event that the claims are in condition for allowance so that a terminal disclaimer can be immediately filed by facsimile.

Claims 1, 9 and 19 were also provisionally rejected under 35 U.S.C. §101 as claiming the same invention as that of the claims 1, 11 and 21, respectively, of co-pending Application No 10/156,170 (170).

Applicant respectfully offers to file a terminal disclaimer to obviate the obviousness-type double patenting rejection in the event that the pending claims are considered to be in condition for allowance. Of course, in order to facilitate prosecution of the subject application, Examiner is invited to contact the undersigned attorney at the phone number listed below in the event that the claims are in condition for allowance so that a terminal disclaimer can be immediately filed by facsimile.

VIII) NEW CLAIMS

Applicant has added new claims 20-21 that are fully supported by the specification and add no new matter.

New claims 20 and 21 depend from amended independent claims 1 and 9, respectively, and therefore are allowable for at least the above-stated reasons in regards to amended independent claims 1 and 9, respectively.

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CONCLUSION

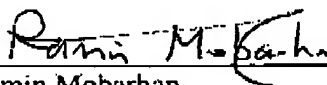
In view of the foregoing it is respectfully submitted that the pending claims are in condition for allowance. Reconsideration of the rejections and objections is requested. Allowance of the claims at an early date is solicited.

The Examiner is invited to contact Applicant's undersigned counsel by telephone at (714) 557-3800 to expedite the prosecution of this case should there be any unresolved matters remaining.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees in connection with the filing of this paper, including extension of time fees, to Deposit Account 02-2666 and please credit any excess fees to such deposit account.


Respectfully submitted,
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Dated: December 27, 2005


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*I hereby certify that this correspondence is
being transmitted via facsimile to the Patent and
Trademark Office under 37 CFR §1.8 on:
December 27, 2005 to Examiner Jason D. Mitchell
at (703) 273-8300.*


Tu Nguyen 12/27/2005